

# Cable diagnostics extend service life

**Asset Management & Services**  
Preventive Maintenance



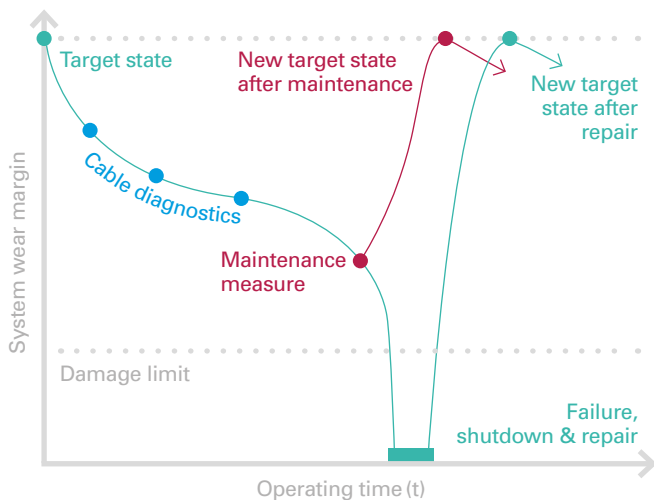
# Determining the status of high-voltage cable systems

## The customer's situation

### Risks often remain undiscovered – Preventing failures and faults failed

Threatening problems usually are not noticed during ongoing operation of high-voltage cable systems. The following causes lead to potential risks:

- Undetected assembly errors or structural damage that cause consequential damage over time
- Ageing and material fatigue of the cable systems and the fittings
- Load peaks that lead to consequential damage at the system weak points
- External influences, such as dust exposure or corrosion
- General material errors in certain cable or accessory types, which become a risk



Cable diagnostics help to plan for maintenance measures on time to avoid failures, to prevent shutdowns and to expand the operating time and service life.

## Problem solving

### Cable diagnostics help to detect risks on time

The following cable diagnostics from Brugg Cables are performed for oil and XLPE cables:

- Sheath check
- High Voltage check
- Recording and analysing partial discharges
- Thermographic examinations (temperature analyses)
- Detailed material analyses (f.e. silicone oil, oil and the lead sheath for oil cables)
- Quality check fibre optics
- Comprehensive visual inspections

### Customer benefits of the cable diagnostic process

- Objective evaluation of the condition and possible risks in the cable system
- Timely introduction of measures, such as repairs or regular inspections to prevent consequential damage and downtime
- Ensuring reliable operation of the cable systems
- Expanding the cable system usage duration and therefore its profitability
- Preventing possible faults and failures
- Reduction of the total operating costs due to avoided fault and failure costs

## Brugg Cables

Brugg Cables is an innovative cable manufacturer from Switzerland that offers an extensive range of power transmission and distribution services. Established by Gottlieb Suhner more than 120 years ago, Brugg Cables is now one of the world's leading cable manufacturers. Throughout our history, our defining characteristics have been our strong customer focus and a highly skilled and professional workforce. Our emphasis has been on innovation and outstanding Swiss quality – since 1896.